

Pertussis Vaccines Working Group Update

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Chair, ACIP Pertussis Vaccine Work Group

Advisory Committee for Immunization Practices

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Work Group Members

(formation in April 2009)

ACIP

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Terms of Reference

- ❑ Review existing statements on infants and young children (1997), adolescent (2006), adults (2006), and pregnant and postpartum women and their infants (2008) and consolidate into a single statement.
- ❑ Review new data on Tdap including
 - Effectiveness of ACIP recommendations
 - Interval between Td booster and Tdap
 - Use of Tdap in adults ages 65 yrs and older
 - Pregnant and breastfeeding women
 - Use of Tdap
 - Cocooning strategies
 - Vaccinated HCP and need for postexposure prophylaxis
 - **Tdap revaccination**
 - Pregnant Women
- ❑ Review updated epidemiology of tetanus and diphtheria

Policy Updates since October 2012

□ February 22

- **MMWR: “Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis (Tdap) Vaccine in Pregnant Women -- Advisory Committee on Immunization Practices (ACIP), 2012”**

Today's Session

- ❑ **Update on the immunization safety plan for Tdap use in pregnant women**

- ❑ **Pertussis in the United States and Tdap revaccination**
 - Update on epidemiology of pertussis
 - Tdap effectiveness
 - Antibody persistence following a single Tdap
 - Safety and immunogenicity after a second Tdap
 - Framework for a decision and cost effectiveness analysis for Tdap revaccination

Tdap Vaccines: licensure and composition

Trade name, Manufacturer	Age approved for use (yrs)	Antigen (μg)				Toxoid (Lf)	
		PT	FHA	PRN	FIM 2 & 3	Diphtheria	Tetanus
Adacel Sanofi Pasteur	11 - 64	2.5	5	3	5	2	5
Boostrix GSK	10 and older	8	8	2.5	-	2.5	5

*PT - pertussis toxin; FHA - filamentous haemagglutinin; PRN - pertactin; FIM - fimbriae

Current ACIP Recommendations for Tdap

❑ A single Tdap dose

- Adolescents aged 11 through 18 years, preferred 11 or 12 years
- Adults aged 19 years and older
- Further guidance will be forthcoming on timing of revaccination in persons who have received Tdap previously
- Pregnant women are recommended Tdap with every pregnancy

❑ Decennial Td booster for those who have received 1 Tdap

- 5 years for wound management

WG Review and Considerations: Tdap revaccination of the general population

- ❑ Current Tdap policy and objectives**
- ❑ Epidemiology of pertussis and state of vaccination program**
- ❑ Summary of Tdap vaccine performance**
 - Antibody persistence
 - Effectiveness/duration of protection
 - Revaccination
 - Safety
 - Immunogenicity
- ❑ Revaccination options**
 - Framework for decision and cost-effectiveness analysis
- ❑ Programmatic feasibility and acceptability**

Next steps for WG

- ❑ **Tdap revaccination (June 2013)**
 - Tdap vaccine effectiveness and duration studies
 - Decision and cost effectiveness analysis
 - GRADE (question yet to be determined)

- ❑ **Draft of updated DTaP and Tdap statement (2013)**